

Appendix A

Privacy Policy

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<https://policies.google.com/privacy/archive/20160628>

PRIVACY POLICY

Last modified: June 28, 2016 ([view archived versions](#))

There are many different ways you can use our services – to search for and share information, to communicate with other people or to create new content. When you share information with us, for example by creating a [Google Account](#), we can make those services even better – to show you [more relevant search results](#) and ads, to help you [connect with people](#) or to make [sharing with others quicker and easier](#). As you use our services, we want you to be clear how we're using information and the ways in which you can protect your privacy.

Our Privacy Policy explains:

- What information we collect and why we collect it.
- How we use that information.
- The choices we offer, including how to access and update information.

We've tried to keep it as simple as possible, but if you're not familiar with terms like cookies, IP addresses, pixel tags and browsers, then read about these [key terms](#) first.

Your privacy matters to Google so whether you are new to Google or a long-time user, please do take the time to get to know our practices – and if you have any questions [contact us](#).

Information we collect

We collect information to provide better services to all of our users – from figuring out basic stuff like which language you speak, to more complex things like which [ads you'll find most useful](#), [the people who matter most to you online](#), or which YouTube videos you might like.

We collect information in the following ways:

- **Information you give us.** For example, many of our services require you to sign up for a Google Account. When you do, we'll ask for [personal information](#), like your name, email address, telephone number or [credit card](#) to store with your account. If you want to take full advantage of the sharing features we offer, we might also ask you to create a publicly visible [Google Profile](#), which may include your name and photo.
- **Information we get from your use of our services.** We [collect information](#) about the services that you use and how you use them, like when you watch a video on YouTube, visit a website that uses our advertising services, or [view and interact with our ads](#) and content. This information includes:
 - [Device information](#)

We collect [device-specific information](#) (such as your hardware model, operating system version, [unique device identifiers](#), and mobile network information including phone number). Google may associate your [device identifiers](#) or [phone number](#) with your Google Account.

- **Log information**

When you use our services or view content provided by Google, we automatically collect and store certain information in [server logs](#). This includes:

- details of how you used our service, such as your search queries.
- telephony log information like your phone number, calling-party number, forwarding numbers, time and date of calls, duration of calls, SMS routing information and types of calls.
- [Internet protocol address](#).
- device event information such as crashes, system activity, hardware settings, browser type, browser language, the date and time of your request and referral URL.
- cookies that may uniquely identify your browser or your Google Account.

- **Location information**

When you use Google services, we [may collect and process information about your actual location](#). We use various technologies to determine location, including IP address, GPS, [and other sensors](#) that may, for example, provide Google with information on nearby devices, [Wi-Fi access points and cell towers](#).

- **Unique application numbers**

Certain services include a unique application number. This number and information about your installation (for example, the operating system type and application version number) may be sent to Google when you install or uninstall that service or when that service periodically contacts our servers, such as for automatic updates.

- **Local storage**

We may collect and store information (including personal information) locally on your device using mechanisms such as [browser web storage](#) (including HTML 5) and [application data caches](#).

- **Cookies and similar technologies**

[We and our partners](#) use various technologies to collect and store information when you visit a Google service, and this may include using [cookies or similar technologies](#) to identify your browser or device. We also

use these technologies to collect and store information when you interact with services we offer to our partners, such as [advertising services](#) or Google features that may appear on other sites. Our Google Analytics product helps businesses and site owners analyze the traffic to their websites and apps. When used in conjunction with our advertising services, such as those using the DoubleClick cookie, Google Analytics information is linked, by the Google Analytics customer or by Google, using Google technology, with information about visits to multiple sites.

Information we collect when you are signed in to Google, in addition to information we obtain about you from partners, may be associated with your Google Account. When information is associated with your Google Account, we treat it as personal information. For more information about how you can access, manage or delete information that is associated with your Google Account, visit the [Transparency and choice](#) section of this policy.

How we use information we collect

We use the information we collect from all of our services to [provide, maintain, protect](#) and improve them, to [develop new ones](#), and to [protect Google and our users](#). We also use this information to offer you tailored content – like giving you more relevant search results and ads.

We may use the name you provide for your Google Profile across all of the services we offer that require a Google Account. In addition, we may replace past names associated with your Google Account so that you are represented consistently across all our services. If other users already have your email, or other information that identifies you,

we may show them your publicly visible Google Profile information, such as your name and photo.

If you have a Google Account, we may display your Profile name, Profile photo, and actions you take on Google or on third-party applications connected to your Google Account (such as +1's, reviews you write and comments you post) in our services, including displaying in ads and other commercial contexts. We will respect the choices you make to [limit sharing or visibility settings](#) in your Google Account.

When you contact Google, we keep a record of your communication to help solve any issues you might be facing. We may use your email address to inform you about our services, such as letting you know about upcoming changes or improvements.

We use information collected from cookies and other technologies, like [pixel tags](#), to [improve your user experience](#) and the overall quality of our services. One of the products we use to do this on our own services is Google Analytics. For example, by saving your language preferences, we'll be able to have our services appear in the language you prefer. When showing you tailored ads, we will not associate an identifier from cookies or similar technologies with [sensitive categories](#), such as those based on race, religion, sexual orientation or health.

Our automated systems analyze your content (including emails) to provide you personally relevant product features, such as customized search results, tailored advertising, and spam and malware detection.

We may combine personal information from one service with information, including personal information, from other Google services – for example to make it easier to share things with people you know. Depending on your account settings, your activity on

other sites and apps may be associated with your personal information in order to improve Google's services and the ads delivered by Google.

We will ask for your consent before using information for a purpose other than those that are set out in this Privacy Policy.

Google processes personal information on our servers in many countries around the world. We may process your personal information on a server located outside the country where you live.

Transparency and choice

People have different privacy concerns. Our goal is to be clear about what information we collect, so that you can make meaningful choices about how it is used. For example, you can:

- [Review and update your Google activity controls](#) to decide what types of data, such as videos you've watched on YouTube or past searches, you would like saved with your account when you use Google services. You can also visit these [controls](#) to manage whether certain activity is stored in a cookie or similar technology on your device when you use our services while signed-out of your account.
- [Review and control](#) certain types of information tied to your Google Account by using Google Dashboard.
- [View and edit](#) your preferences about the Google ads shown to you on Google and across the web, such as which categories might interest you, using Ads Settings. You can also opt out of certain Google advertising services [here](#).

- [Adjust](#) how the Profile associated with your Google Account appears to others.
- [Control](#) who you share information with through your Google Account.
- [Take information](#) associated with your Google Account out of many of our services.
- [Choose](#) whether your Profile name and Profile photo appear in shared endorsements that appear in ads.

You may also set your browser to block all cookies, including cookies associated with our services, or to indicate when a cookie is being set by us. However, it's important to remember that many of our services [may not function properly](#) if your cookies are disabled. For example, we may not remember your language preferences.

Information you share

Many of our services let you share information with others. Remember that when you share information publicly, it may be indexable by search engines, including Google. Our services provide you with different options on [sharing](#) and [removing your content](#).

Accessing and updating your personal information

Whenever you use our services, we aim to provide you with [access to your personal information](#). If that information is wrong, we strive to give you ways to update it quickly

or to delete it – unless we have to keep that information for legitimate business or legal purposes. When updating your personal information, we may ask you to verify your identity before we can act on your request.

We may reject requests that are unreasonably repetitive, require disproportionate technical effort (for example, developing a new system or fundamentally changing an existing practice), risk the privacy of others, or would be extremely impractical (for instance, requests concerning information residing on backup systems).

Where we can provide information access and correction, we will do so for free, except where it would require a disproportionate effort. We aim to maintain our services in a manner that protects information from accidental or malicious destruction. Because of this, after you delete information from our services, we may not immediately delete residual copies from our active servers and may not remove information from our backup systems.

Information we share

We do not share personal information with companies, organizations and individuals outside of Google unless one of the following circumstances applies:

- **With your consent**

We will share personal information with companies, organizations or individuals outside of Google when we have your consent to do so. We require opt-in consent for the sharing of any [sensitive personal information](#).

- **With domain administrators**

If your Google Account is managed for you by a [domain administrator](#) (for example, for Google Apps users) then your domain administrator and resellers who provide user support to your organization will have access to your Google Account information (including your email and other data). Your domain administrator may be able to:

- view statistics regarding your account, like statistics regarding applications you install.
- change your account password.
- suspend or terminate your account access.
- access or retain information stored as part of your account.
- receive your account information in order to satisfy applicable law, regulation, [legal process or enforceable governmental request](#).
- restrict your ability to delete or edit information or privacy settings.

Please refer to your domain administrator's privacy policy for more information.

- **For external processing**

We provide personal information to our [affiliates](#) or other trusted businesses or persons to process it for us, based on our instructions and in compliance with our Privacy Policy and any other appropriate confidentiality and security measures.

- **For legal reasons**

We will share personal information with companies, organizations or individuals outside of Google if we have a good-faith belief that access, use, preservation or disclosure of the information is reasonably necessary to:

- meet any applicable law, regulation, [legal process or enforceable governmental request](#).
- enforce applicable Terms of Service, including investigation of potential violations.
- detect, prevent, or otherwise address fraud, security or technical issues.
- protect against harm to the rights, property or safety of Google, our users or the public as required or permitted by law.

[We may share non-personally identifiable information](#) publicly and with our partners – [like publishers, advertisers or connected sites](#). For example, we may share information publicly [to show trends](#) about the general use of our services.

If Google is involved in a merger, acquisition or asset sale, we will continue to ensure the confidentiality of any personal information and give affected users notice before personal information is transferred or becomes subject to a different privacy policy.

Information security

We work hard to protect Google and our users from unauthorized access to or unauthorized alteration, disclosure or destruction of information we hold. In particular:

- We encrypt many of our services [using SSL](#).
- We offer you [two step verification](#) when you access your Google Account, and a [Safe Browsing feature](#) in Google Chrome.
- We review our information collection, storage and processing practices, including physical security measures, to guard against unauthorized access to systems.
- We restrict access to personal information to Google employees, contractors and agents who need to know that information in order to process it for us, and who are subject to strict contractual confidentiality obligations and may be disciplined or terminated if they fail to meet these obligations.

When this Privacy Policy applies

Our Privacy Policy applies to all of the services offered by Google Inc. and its affiliates, including YouTube, services Google provides on Android devices, and services offered on other sites (such as our advertising services), but excludes services that have separate privacy policies that do not incorporate this Privacy Policy.

Our Privacy Policy does not apply to services offered by other companies or individuals, including products or sites that may be displayed to you in search results, sites that may include Google services, or other sites linked from our services. Our Privacy Policy does not cover the information practices of other companies and organizations who advertise our services, and who may use cookies, pixel tags and other technologies to serve and offer relevant ads.

Compliance and cooperation with regulatory authorities

We regularly review our compliance with our Privacy Policy. We also adhere to several [self regulatory frameworks](#). When we receive formal written complaints, we will contact the person who made the complaint to follow up. We work with the appropriate regulatory authorities, including local data protection authorities, to resolve any complaints regarding the transfer of personal data that we cannot resolve with our users directly.

Changes

Our Privacy Policy may change from time to time. We will not reduce your rights under this Privacy Policy without your explicit consent. We will post any privacy policy changes on this page and, if the changes are significant, we will provide a more prominent notice (including, for certain services, email notification of privacy policy changes). We will also keep prior versions of this Privacy Policy in an archive for your review.

Specific product practices

The following notices explain specific privacy practices with respect to certain Google products and services that you may use:

- [Chrome and Chrome OS](#)
- [Play Books](#)
- [Payments](#)
- [Fiber](#)
- [Project Fi](#)
- [Google Apps for Education](#)

For more information about some of our most popular services, you can visit the [Google Product Privacy Guide](#).

Other useful privacy and security related materials

Further useful privacy and security related materials can be found through Google's [policies and principles pages](#), including:

- Information about our [technologies and principles](#), which includes, among other things, more information on
 - [how Google uses cookies](#).
 - technologies we use for [advertising](#).
 - how we [recognize patterns like faces](#).
- A [page](#) that explains what data is shared with Google when you visit websites that use our advertising, analytics and social products.
- The [Privacy Checkup](#) tool, which makes it easy to review your key privacy settings.
- Google's [safety center](#), which provides information on how to stay safe and secure online.

"access to your personal information"

For example, with Google Dashboard you can quickly and easily see some of the data associated with your Google Account. [Learn more](#).

"ads you'll find most useful"

For example, if you frequently visit websites and blogs about gardening, you may see ads related to gardening as you browse the web. [Learn more](#).

"advertising services"

For example, if you frequently visit websites and blogs about gardening that show our ads, you may start to see ads related to this interest as you browse the web. [Learn more.](#)

"and other sensors"

Your device may have sensors that provide information to assist in a better understanding of your location. For example, an accelerometer can be used to determine things like speed, or a gyroscope to figure out direction of travel. [Learn more.](#)

"collect information"

This includes information like your usage data and preferences, Gmail messages, G+ profile, photos, videos, browsing history, map searches, docs, or other Google-hosted content. [Learn more.](#)

"combine personal information from one service with information, including personal information, from other Google services"

For example, when you're signed in to your Google Account and search on Google, you can see search results from the public web, along with pages, photos, and Google+ posts from your friends and people who know you or follow you on Google+ may see your posts and profile in their results. [Learn more.](#)

"connect with people"

For example, you could get suggestions of people you might know or want to connect with on Google+, based on the connections you have with people on other Google products, like Gmail and people who have a connection with you may see your profile as a suggestion. [Learn more.](#)

"credit card"

Whilst we currently don't ask for a credit card during sign up, verifying your age through a small credit card transaction is one way to confirm that you meet our age requirements in case your account was disabled after you have entered a birthday indicating you are not old enough to have a Google Account. [Learn more.](#)

"develop new ones"

For example, Google's spell checking software was developed by analyzing previous searches where users had corrected their own spelling. [Learn more.](#)

"device identifiers"

Device identifiers let Google know which unique device you are using to access our services, which can be used to customise our service to your device or analyse any device issues related to our services. [Learn more.](#)

"device-specific information"

For example, when you visit Google Play from your desktop, Google can use this information to help you decide on which devices you'd like your purchases to be available for use. [Learn more.](#)

"improve your user experience"

For example, cookies allow us to analyse how users interact with our services. [Learn more.](#)

"legal process or enforceable governmental request"

Like other technology and communications companies, Google regularly receives requests from governments and courts around the world to hand over user data. Our legal team reviews each and every request, regardless of type, and we frequently push back when the requests appear to be overly broad or don't follow the correct process.

[Learn more.](#)

"limit sharing or visibility settings"

For example, you can choose your settings so your name and photo do not appear in an ad. [Learn more.](#)

"linked with information about visits to multiple sites"

Google Analytics is based on first-party cookies. Data generated through Google Analytics can be linked, by the Google Analytics customer or by Google, using Google technology, to third-party cookies, related to visits to other websites, for instance when an advertiser wants to use its Google Analytics data to create more relevant ads, or to further analyze its traffic. [Learn more.](#)

"maintain"

For example, we continuously monitor our systems to check that they are working as intended and in order to detect and fix errors. [Learn more.](#)

"may collect and process information about your actual location"

For example, Google Maps can center the maps view on your current location. [Learn more.](#)

"may not function properly"

For example, we use a cookie called 'lbc's' which makes it possible for you to open many Google Docs in one browser. [Learn more.](#)

"and our partners"

We allow trusted businesses to use cookies or similar technologies for advertising and research purposes on our services. [Learn more.](#)

"phone number"

For example, if you add a phone number as a recovery option, if you forget your password Google can send you a text message with a code to enable you to reset it.

[Learn more.](#)

"protect Google and our users"

For example, if you're concerned about unauthorized access to your email, "Last account activity" in Gmail shows you information about recent activity in your email, such as the IP addresses that accessed your mail, the associated location, as well as the time and date. [Learn more.](#)

"protect"

For example, one reason we collect and analyze IP addresses and cookies is to protect our services against automated abuse. [Learn more.](#)

"provide"

For example, the IP address assigned to your device is used to send the data you requested back to your device. [Learn more.](#)

"sharing"

For example, with Google+, you have many different sharing options. [Learn more.](#)

"sharing with others quicker and easier"

For example, if someone is already a contact, Google will autocomplete their name if you want to add them to a message in Gmail. [Learn more.](#)

"the people who matter most to you online"

For example, when you type an address in the To, Cc, or Bcc field of a message you're composing, Gmail will suggest addresses from your Contacts list. [Learn more.](#)

"to make it easier to share things with people you know"

For example, if you have communicated with someone via Gmail and want to add them to a Google Doc or an event in Google Calendar, Google makes it easy to do so by autocompleting their email address when you start to type in their name. [Learn more.](#)

"view and interact with our ads"

For example, we regularly report to advertisers on whether we served their ad to a page and whether that ad was likely to be seen by users (as opposed to, for example, being on part of the page to which users did not scroll). [Learn more.](#)

"We may share aggregated, non-personally identifiable information publicly"

When lots of people start searching for something, it can provide very useful information about particular trends at that time. [Learn more.](#)

"Wi-Fi access points and cell towers"

For example, Google can approximate your device's location based on the known location of nearby cell towers. [Learn more.](#)

"more relevant search results"

For example, we can make search more relevant and interesting for you by including photos, posts, and more from you and your friends. [Learn more.](#)

"removing your content"

For example, you can delete your [Web & App Activity](#), [your blog](#), [a Google Site you own](#), [your YouTube Channel](#), [your Google+ profile](#) or [your entire Google account](#). [Learn more.](#)

"to show trends"

You can see some of these at [Google Trends](#) and [YouTube Trends](#). [Learn more.](#)

"your activity on other sites and apps"

This activity might come from your use of Google products like Chrome Sync or from your visits to sites and apps that partner with Google. Many websites and apps partner with Google to improve their content and services. For example, a website might use our advertising services (like AdSense) or analytics tools (like Google Analytics). These products share information about your activity with Google and, depending on your account settings and the products in use (for instance, when a partner uses Google

Analytics in conjunction with our advertising services), this data may be associated with your personal information. [Learn more.](#)

How Google uses your data for ads

**as published on September 26, 2016,
downloaded on August 23, 2023, available at:**

<https://web.archive.org/web/20160926141132/https://privacy.google.com/how-ads-work.html>



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How Ads Work

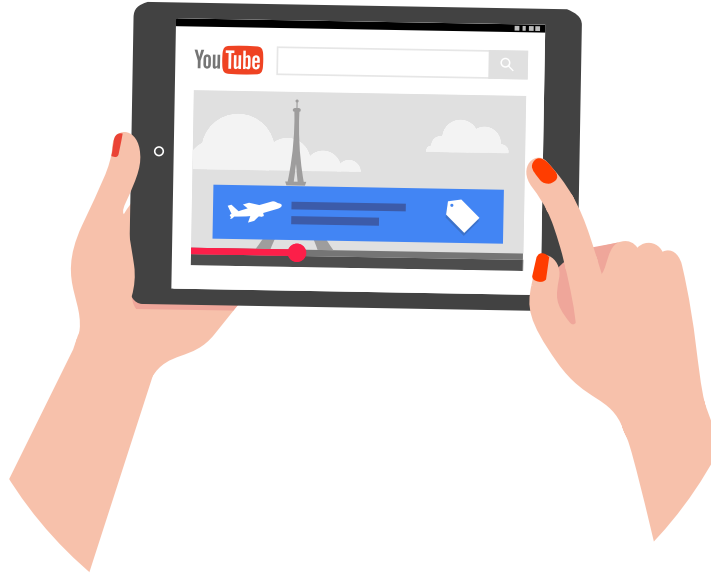
We do not sell your personal information to anyone.



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and mobile apps that partner with us. Ads help keep our services free for everyone. We use data to show you these ads, but we do not sell personal information like your name, email address, and payment information.



We use data to make ads relevant

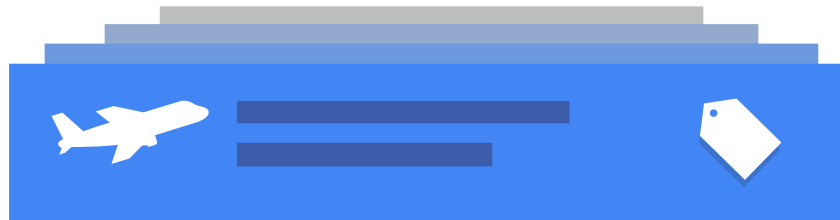
We try to show you useful ads by using data collected from your devices, including your searches and location, websites and apps you have used, videos and ads you have seen, and personal information you have given us, such as your age



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If you are signed in and depending on your ad settings, the data informs the ads you see across your devices. So if you visit a travel website on your computer at work, you might see ads about airfares to Paris on your phone later that night.



Advertisers pay only for ads that people see or tap

When advertisers run ad campaigns with us, they pay us based only on how those ads actually perform — never on your personal information. That could include each time someone views or taps an ad, or takes an action having seen an ad, like downloading an app or filling out a request form.



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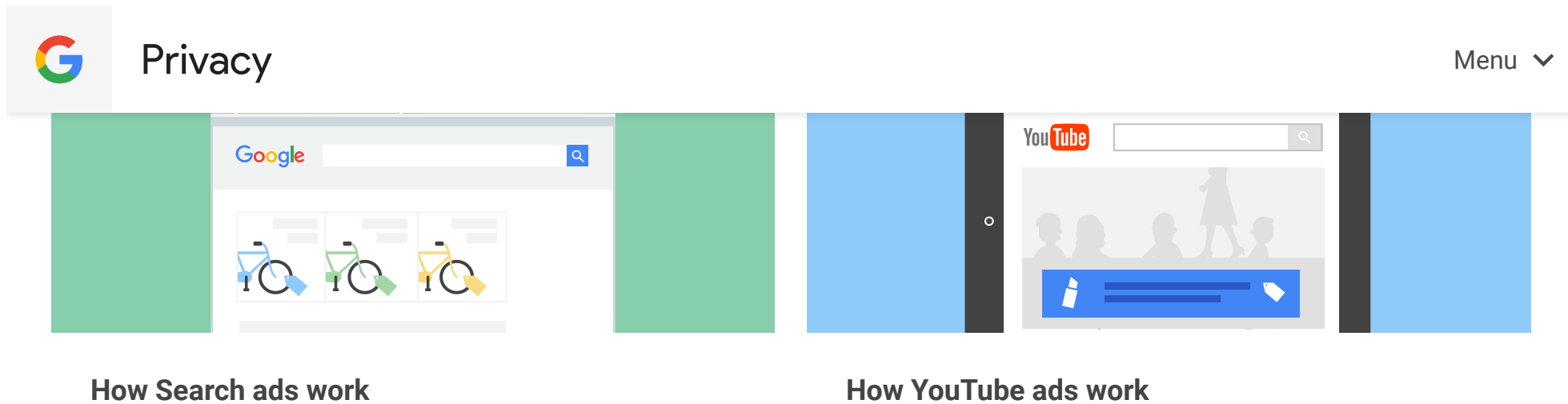
We show advertisers how well their campaigns worked

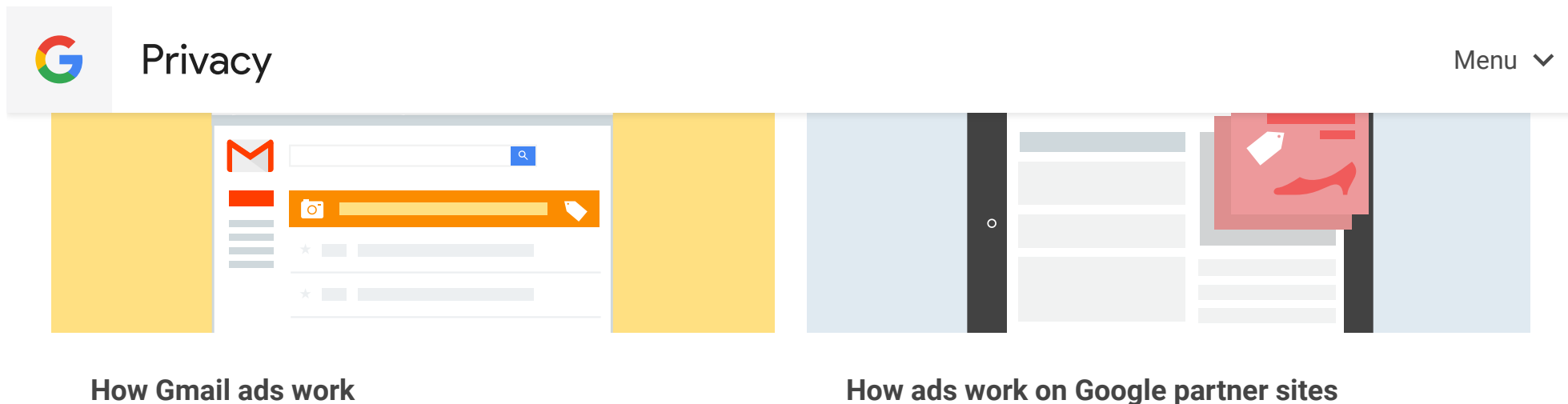
We give advertisers data about their ads' performance, but we do so without revealing any of your personal information.

At every point in the process of showing you ads, we keep your personal information protected and private.

How ads work on Google services and partner sites

We use data to show ads that are useful to you, whether they are on Google services or websites and mobile apps that partner with us.





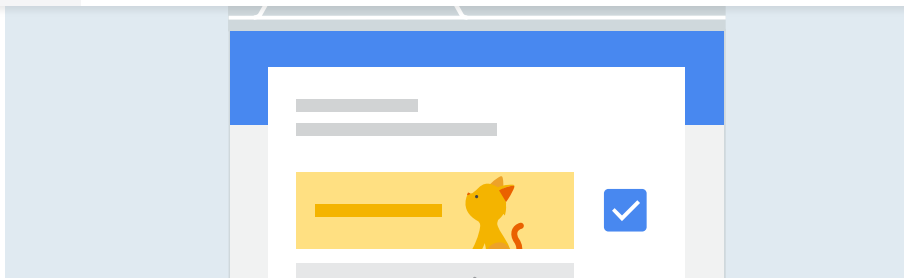
Take control of your Google ads experience

We give you tools to control the types of ads you see whether you are signed in or signed out.

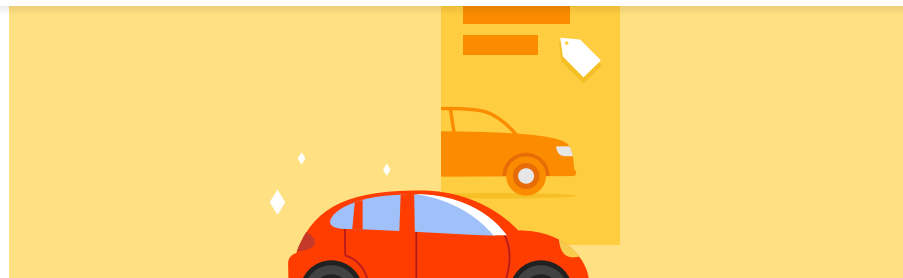


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Control ads based on your preferences



Remove ads you do not want to see





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Learn what data we use to show you ads





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Safer Internet

**We help make the Internet safer
for everyone.**



safer, we find opportunities to share it for everyone's benefit. And as threats change over time, our adaptive, forward-looking measures pave the way for other companies to follow.

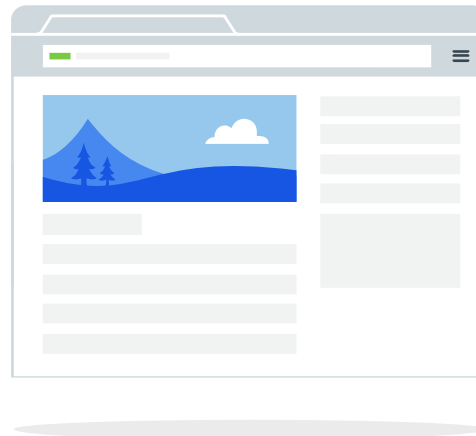


Safe Browsing protects more than just Chrome users

We originally built our [Safe Browsing technology](#) to protect Chrome users from malware and phishing attempts by alerting them when they try to visit dangerous websites. To make the Internet safer for everyone, we made this

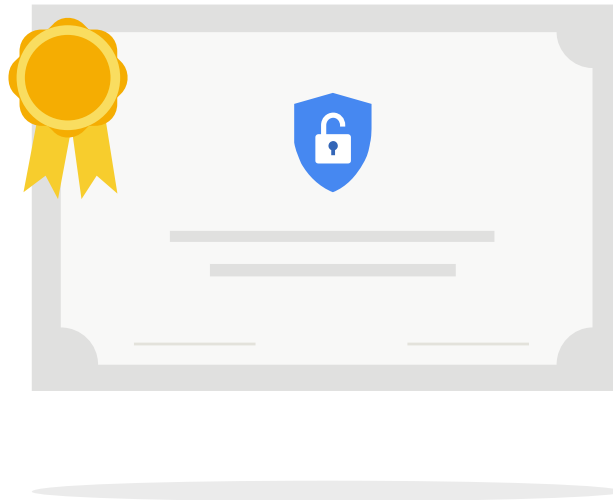


We also alert website owners when their sites have security flaws and offer free tools to help them quickly fix the problems. By continuing to share new security technology as we develop it, we help build an Internet that is safer for everyone.



We use HTTPS to keep you safer while you browse the Internet

Connecting to our services through [HTTPS encryption](#) protects you from prying eyes and malicious hackers to make sure you get only to what and where you want. To motivate websites to adopt this added security, we have made HTTPS



We create security rewards to uncover vulnerabilities

At Google we create [security rewards programs](#) that pay independent researchers to find vulnerabilities in our services and create security fixes. Every year we award millions of dollars in research grants and bug bounties. We currently use security reward programs for many Google products, like Chrome and Android.



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We make our security tools available to developers

We share our security technology when we believe it can provide value for others. For example, we make our Google Cloud Security Scanner freely available to developers so they can scan and analyze their web applications in App Engine for security vulnerabilities.



We share data about our practices to foster a safer Internet

Since 2010 Google has published the [Transparency Report](#), which features statistics on things like copyright removals, government requests for user data, and security initiatives like Safe Browsing. We also share data on the industry's adoption of encryption for websites and email. We do this not only to share our progress with our users, but to encourage others to adopt stronger security standards in the interest of a safer Internet for all.



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Your Data

We want you to understand what data we collect and use.



Here are the three main types of data we collect:



Things you do

When you use our services — for example, do a search on Google, get directions on Google Maps, or watch a video on YouTube — we collect data to make these services work for you. This can include:

- Things you search for



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- Ads you click on or tap
- Your location
- Device information
- IP address and cookie data



Things you create

If you are signed in with your Google Account, we store and protect what you create using our services. This can include:



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- Calendar events
- Photos and videos you upload
- Docs, Sheets, and Slides on Drive



Things that make you “you”

When you sign up for a Google account, we keep the basic information that you give us. This can include your:

- Name



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- Gender
- Phone number
- Country

How data improves Google services

Here are a few ways we use data to make our services faster, smarter, and more useful to you.



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Take control of your Google experience

Here are some tools you can use anytime to manage your privacy.



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Google

Privacy Policy

My Account

Advertising – Privacy & Terms

as published on June 29, 2016,

downloaded on August 23, 2023, available at:

https://web.archive.org/web/20160629135224/https://www.google.com/policies/technologies/ads
/

The Wayback Machine - <https://web.archive.org/web/20160629135224/http://www.google.com/policies/technologies/ads/>



Advertising

Advertising keeps Google and many of the websites and services you use free of charge. We work hard to make sure that ads are safe, unobtrusive, and as relevant as possible. For example, you won't see pop-up ads on Google, and we terminate the accounts of hundreds of thousands of publishers and advertisers that violate our policies each year – including ads containing malware, ads for counterfeit goods, or ads that attempt to misuse your personal information.

How Google uses cookies in advertising

Cookies help to make advertising more effective. Without cookies, it's harder for an advertiser to reach its audience, or to know how many ads were shown and how many clicks they received.

Many websites, such as news sites and blogs, partner with Google to show ads to their visitors. Working with our partners, we may use cookies for a number of purposes, such as to stop you from seeing the same ad over and over again, to detect and stop click fraud, and to show ads that are likely to be more relevant (such as ads based on websites you have visited).

We store a record of the ads we serve in our logs. These [server logs](#) typically include your web request, IP address, browser type, browser language, the date and time of your request, and one or more cookies that may uniquely identify your browser. We store this data for a number of reasons, the most important of which are to improve our services and to maintain the security of our systems. We anonymize this log data by removing part of the IP address (after 9 months) and cookie information (after 18 months).

Our advertising cookies

To help our partners manage their advertising and websites, we offer many products, including AdSense, AdWords, Google Analytics, and a range of DoubleClick-branded services. When you visit a page that uses one of these products, either on one of Google's sites or one of our partners', various cookies may be sent to your browser.

These may be set from a few different domains, including google.com, doubleclick.net, invitemedia.com, admeld.com, googlesyndication.com, or googleadservices.com. Some of our advertising products enable our partners to use other services in conjunction with ours (like an ad measurement and reporting service), and these services may send their own cookies to your browser. These cookies will be set from their domains.

See more detail about the [types of cookies used by Google](#) and our partners and [how we use them](#).

How you can control advertising cookies

You can use [Ads Settings](#) to manage the Google ads you see and opt out of Ads Personalization. Even if you opt out of Ads Personalization, you may still see ads based on factors such as your general location derived from your IP address, your browser type, and your search terms.

You can also manage many companies' cookies used for online advertising via the consumer choice tools created under self-regulation programs in many countries, such as the US-based [aboutads.info choices](#) page or the EU-based [Your Online Choices](#).

Finally, you can [manage cookies in your web browser](#).

Other technologies used in advertising

Google's advertising systems may use other technologies, including Flash and HTML5, for functions like display of interactive ad formats. We may use the [IP address](#), for example, to identify your general location. We may also select advertising based on information about your computer or device, such as your device model, browser type, or sensors in your device like the accelerometer.

Location

Google's ad products may receive or infer information about your location from a variety of sources. For example, we may use the IP address to identify your general location; we may receive precise location from your mobile device; we may infer your location from your search queries; and websites or apps that you use may send information about your location to us. Google uses location information in our ads products to infer demographic information, to improve the relevance of the ads you see, to measure ad performance and to report aggregate statistics to advertisers.

Advertising identifiers on mobile devices

To serve ads in services where cookie technology may not be available (for example, in mobile applications), we may use technologies that perform similar functions to cookies.

Sometimes Google links the identifier used for advertising on mobile applications to an advertising cookie on the same device in order to coordinate ads across your mobile apps and mobile browser. This can happen, for example, when you see an ad within an app that launches a web page in your mobile browser. This also helps us improve the reports we give to our advertisers on the effectiveness of their campaigns.

To opt out of personalized ads in apps on your mobile device, follow the instructions below.

Android

1. Find Google Settings in one of these places (depending on your device):
 1. A separate app called **Google Settings**
 2. In your main **Settings** app, scroll down and tap **Google**
2. Tap **Ads**
3. Switch on **Opt out of interest-based ads**

iOS

Devices with iOS use Apple's Advertising Identifier. To learn more about your choices for use of this identifier, visit the **Settings** app on your device.

What determines the ads by Google that I see?

Many decisions are made to determine which ad you see.

Sometimes the ad you see is based on your current or past location. Your IP address is usually a good indication of your approximate location. So you might see an ad on the homepage of YouTube.com that promotes a forthcoming movie in your country, or a search for 'pizza' might return results for pizza places in your town.

Sometimes the ad you see is based on the context of a page. If you're looking at a page of gardening tips, you might see ads for gardening equipment.

Sometimes you might also see an ad on the web that's based on your app activity or activity on Google services; an in-app ad that's based on your web activity; or an ad based on your activity on another device.

Sometimes the ad you see on a page is served by Google but selected by another company. For example, you might have registered with a newspaper website. From information you've given the newspaper, it can make decisions about which ads to show you, and it can use Google's ad serving products to deliver those ads.

You may also see ads on Google products and services, including Search, Gmail, and YouTube, based on information, such as your email address, that you provided to advertisers and the advertisers then shared with Google.

Why am I seeing ads by Google for products I've viewed?

You may see ads for products you previously viewed. Let's suppose you visit a website that sells golf clubs, but you don't buy those clubs on your first visit. The website owner might want to encourage you to return and complete your purchase. Google offers services that let website operators target their ads to people who visited their pages.

For this to work, Google either reads a cookie that's already in your browser or places a cookie in your browser when you visit the golfing site (assuming your browser lets this happen).

When you visit another site that works with Google, which may have nothing to do with golfing, you might see an ad for those golf clubs. That's because your browser sends Google the same cookie. In turn, we may use that cookie to serve you an ad that could encourage you to buy those golf clubs.

Your visit to the golfing site may also be used by Google to show you personalized ads when you later search for golf clubs on Google.

We do have restrictions on this type of ad. For example, we prohibit advertisers from selecting an audience based on sensitive information, such as health information or religious beliefs.

Learn more about [Google ads](#).

Key Terms – Privacy & Terms

**as published on June 27, 2016,
downloaded on August 24, 2023, available at:**

<https://web.archive.org/web/20160627215305/https://www.google.com/policies/privacy/key-terms/>

The Wayback Machine - <https://web.archive.org/web/20160627215305/http://www.google.com:80/policies/privacy/key-terms/>



Key terms

- [Affiliates](#)
- [Application data cache](#)
- [Browser web storage](#)
- [Cookies and similar technologies](#)
- [Device](#)
- [Google Account](#)
- [HTTP Referrer](#)
- [IP address](#)
- [Non-personally identifiable information](#)
- [Personal information](#)
- [Pixel tag](#)
- [Sensitive Categories](#)
- [Sensitive personal information](#)
- [Server logs](#)
- [Unique device identifier](#)

Affiliates

An affiliate is an entity that belongs to the Google group of companies.

Application data cache

An application data cache is a data repository on a device. It can, for example, enable a web application to run without an internet connection and improve the performance of the application by enabling faster loading of content.

Browser web storage

Browser web storage enables websites to store data in a browser on a device. When used in "local storage" mode, it enables data to be stored across sessions (for example, so that the data are retrievable even after the browser has been closed and reopened). One technology that facilitates web storage is HTML 5.

Cookies and similar technologies

A cookie is a small file containing a string of characters that is sent to your computer when you visit a website. When you visit the website again, the cookie allows that site to recognize your browser. Cookies may store user preferences and other information. You can reset your browser to refuse all cookies or to indicate when a cookie is being sent. However, some website features or services may not function properly without cookies. Other technologies are used for similar purposes as a cookie on other platforms where cookies are not available or applicable, such as the Advertising ID available on Android mobile devices. Learn more about [how Google uses cookies](#) and how Google uses data, including cookies, [when you use our partners' sites or apps](#).

Device

A device is a computer that can be used to access Google services. For example, a device could be a desktop, tablet or smartphone.

Google Account

You may access some of our services by signing up for a [Google Account](#) and providing us with some personal information (typically your name, email address and a password). This account information will be used to authenticate you when you access Google services and protect your account from unauthorized access by others. You can edit or terminate your account at any time through your Google Account settings.

HTTP Referrer

An HTTP Referrer is information transmitted to a destination webpage by a web browser, typically when you click a link to that webpage. The HTTP Referrer contains the URL of the last webpage the browser visited.

IP address

Every device connected to the Internet is assigned a number known as an Internet protocol (IP) address. These numbers are usually assigned in geographic blocks. An IP address can often be used to identify the location from which a device is connecting to the Internet.

Non-personally identifiable information

This is information that is recorded about users so that it no longer reflects or references an individually identifiable user.

Personal information

This is information which you provide to us which personally identifies you, such as your name, email address or billing information, or other data which can be reasonably linked to such information by Google, such as information we associate with your Google account.

Pixel tag

A pixel tag is a type of technology placed on a website or within the body of an email for the purpose of tracking activity on websites, or when emails are opened or accessed, and is often used in combination with cookies.

Sensitive Categories

An advertising category may be sensitive if it relates to topics such as race, religion, sexual orientation or health. When showing you tailored ads, we may associate a cookie or anonymous identifier with interests such as "Cooking and Recipes" or "Air Travel," but not with sensitive categories. We impose a similar policy on our advertisers.

Sensitive personal information

This is a particular category of personal information relating to confidential medical facts, racial or ethnic origins, political or religious beliefs or sexuality.

Server logs

Like most websites, our servers automatically record the page requests made when you visit our sites. These “server logs” typically include your web request, Internet Protocol address, browser type, browser language, the date and time of your request and one or more cookies that may uniquely identify your browser.

Here is an example of a typical log entry where the search is for “cars”, followed by a breakdown of its parts:

```
123.45.67.89 - 25/Mar/2003 10:15:32 -  
http://www.google.com/search?q=cars -  
Firefox 1.0.7; Windows NT 5.1 - 740674ce2123e969
```

- 123.45.67.89 is the Internet Protocol address assigned to the user by the user’s ISP; depending on the user’s service, a different address may be assigned to the user by their service provider each time they connect to the Internet;
- 25/Mar/2003 10:15:32 is the date and time of the query;
- http://www.google.com/search?q=cars is the requested URL, including the search query;
- Firefox 1.0.7; Windows NT 5.1 is the browser and operating system being used; and
- 740674ce2123a969 is the unique cookie ID assigned to this particular computer the first time it visited Google. (Cookies can be deleted by users. If the user has deleted the cookie from the computer since the last time s/he visited Google, then it will be the unique cookie ID assigned to the user the next time s/he visits Google from that particular computer).

Unique device identifier

A unique device identifier (sometimes called a universally unique ID or UUID) is a string of characters that is incorporated into a device by its manufacturer and can be used to uniquely identify that device (for example an IMEI-number of a mobile phone). Different device identifiers vary in how permanent they are, whether they can be reset by users, and how they can be accessed. A given device may have several different unique device identifiers. Unique device identifiers can be used for various purposes, including security and fraud detection, syncing services such as a user’s email inbox, remembering the user’s preferences and providing relevant advertising.

***How Google uses data when you use our apps –
Privacy & Terms***

as published July 18, 2016,

downloaded on August 24, 2023, available at:

<https://web.archive.org/web/20160718100338/http://www.google.com/policies/privacy/partners/>

The Wayback Machine - <https://web.archive.org/web/20160718100338/http://www.google.com:80/policies/privacy/partners/>



How Google uses data when you use our partners' sites or apps

Many websites use Google technologies to improve their content and keep it free. When you visit a website that uses our advertising products (like AdSense), social products (like the +1 button), or analytics tools (Google Analytics), your web browser automatically sends certain information to Google. This includes, for example, the web address of the page that you're visiting and your IP address. We may also set cookies on your browser or read cookies that are already there.

Similarly, apps that partner with Google can send us information such as the name of the app and an identifier that helps us to determine which ads we've served to other apps on your device. If you are signed in to your Google Account, and depending on your Account settings, we may add that information to your Account, and treat it as personal information.

How we use the information sent by your browser

When you visit websites or use apps that use Google technologies, we may use the information we receive from those websites and apps to, for example:

- Make ads more effective
- Provide reports of ads activity to advertisers and websites hosting the ads, and to ensure payment to those website publishers
- Help website and app owners using Google Analytics to understand how visitors engage with their sites or apps
- Improve your Google+ experience
- Detect and defend against fraud and other security risks to protect users and partners
- Meet our legal duties
- Improve our products

How you can control the information sent to Google

For tips and advice on staying safe and managing your data online, visit the [Google Safety Center](#).

Here are some of the ways you can control the information that is shared by your web browser when you visit or interact with Google services on partners' sites across the web:

- [Ads Settings](#) helps you control the ads by Google that you see across the web. You can learn how ads are selected for you, opt out of Ads Personalization, and block specific advertisers. Learn more about [advertising](#).
- If you are signed in to your Google Account, and depending on your Account settings, you can see and edit some of the information we collect from the sites and apps you have visited.

- Many sites across the web use Google Analytics to understand how visitors engage with their sites or apps. If you don't want Analytics to be used in your browser, you can install the Google Analytics browser add-on. Learn more about Google Analytics and privacy.
- Google makes it easy for you to make recommendations for your friends - for example, by clicking the +1 button on content you like. Some of your +1s may show your name and Google+ profile photo in ads, but you can opt out if you don't want to appear in ads. You can also visit the +1 tab on your Google+ profile to review and manage all of your +1's. Learn more about how to get to your +1 tab.
- Incognito mode in Chrome allows you to browse the web without recording webpages and files in your browser history. Cookies are deleted after you've closed all of your incognito windows and tabs, and your bookmarks and settings are stored until you delete them. Learn more about cookies.

Advertising – Privacy & Terms

**as published on April 4, 2018,
downloaded on August 23, 2023, available at:**

<https://web.archive.org/web/20180404001532/https://policies.google.com/technologies/ads>

The Wayback Machine - <https://web.archive.org/web/20180404001532/https://policies.google.com/technologies/ads>



[Privacy & Terms](#)



Technologies

| Advertising

[How Google uses cookies](#)

[How Google uses pattern recognition](#)

[Types of location data used by Google](#)

[How Google Wallet uses credit card numbers](#)

[How Google Voice works](#)

[Google Product Privacy Guide](#)

Advertising

Advertising keeps Google and many of the websites and services you use free of charge. We work hard to make sure that ads are safe, unobtrusive, and as relevant as possible. For example, you won't see pop-up ads on Google, and we terminate the accounts of hundreds of thousands of publishers and advertisers that violate our policies each year – including ads containing malware, ads for counterfeit goods, or ads that attempt to misuse your personal information.

How Google uses cookies in advertising

Cookies help to make advertising more effective. Without cookies, it's harder for an advertiser to reach its audience, or to know how many ads were shown and how many clicks they received.

Many websites, such as news sites and blogs, partner with Google to show ads to their visitors. Working with our partners, we may use cookies for a number of purposes, such as to stop you from seeing the same ad over and over again, to detect and stop click fraud, and to show ads that are likely to be more relevant (such as ads based on websites you have visited).

We store a record of the ads we serve in our logs. These [server logs](#) typically include your web request, IP address, browser type, browser language, the date and time of your request, and one or more cookies that may uniquely identify your browser. We store this data for a number of reasons, the most important of which are to improve our services and to maintain the security of our systems. We anonymize this log data by removing part of the IP address (after 9 months) and cookie information (after 18 months).

Our advertising cookies

To help our partners manage their advertising and websites, we offer many products, including AdSense, AdWords, Google Analytics, and a range of DoubleClick-branded services. When you visit a page or see an ad that uses one of these products, either on Google services or on other sites and apps, various cookies may be sent to your browser.

These may be set from a few different domains, including google.com, doubleclick.net, googlesyndication.com, or googleadservices.com, or the domain of our partners' sites. Some of our advertising products enable our partners to use other services in conjunction with ours (like an ad measurement and reporting service), and these services may send their own cookies to your browser. These cookies will be set from their domains.

See more detail about the [types of cookies used by Google](#) and our partners and [how we use them](#).

How you can control advertising cookies

You can use [Ads Settings](#) to manage the Google ads you see and opt out of Ads Personalization. Even if you opt out of Ads Personalization, you may still see ads based on factors such as your general location derived from your IP address, your browser type, and your search terms.

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Location

Google's ad products may receive or infer information about your location from a variety of sources. For example, we may use the IP address to identify your general location; we may receive precise location from your mobile device; we may infer your location from your search queries; and websites or apps that you use may send information about your location to us. Google uses location information in our ads products to infer demographic information, to improve the relevance of the ads you see, to measure ad performance and to report aggregate statistics to advertisers.

Advertising identifiers for mobile apps

To serve ads in services where cookie technology may not be available (for example, in mobile applications), we may use technologies that perform similar functions to cookies. Sometimes Google links the identifier used for advertising on mobile applications to an advertising cookie on the same device in order to coordinate ads across your mobile apps and mobile browser. This can happen, for example, when you see an ad within an app that launches a web page in your mobile browser. This also helps us improve the reports we give to our advertisers on the effectiveness of their campaigns.

To opt out of personalized ads in apps on your mobile device, follow the instructions below.

Android

1. Find Google Settings in one of these places (depending on your device):
 - a. A separate app called **Google Settings**
 - b. In your main **Settings** app, scroll down and tap **Google**
2. Tap **Ads**
3. Switch on **Opt out of interest-based ads**

iOS

Devices with iOS use Apple's Advertising Identifier. To learn more about your choices for use of this identifier, visit the **Settings** app on your device.

What determines the ads by Google that I see?

Many decisions are made to determine which ad you see.

Sometimes the ad you see is based on your current or past location. Your IP address is usually a good indication of your approximate location. So you might see an ad on the homepage of YouTube.com that promotes a forthcoming movie in your country, or a search for 'pizza' might return results for pizza places in your town.

Sometimes the ad you see is based on the context of a page. If you're looking at a page of gardening tips, you might see ads for gardening equipment.

Sometimes you might also see an ad on the web that's based on your app activity or activity on Google services; an in-app ad that's based on your web activity; or an ad based on your activity on another device.

Sometimes the ad you see on a page is served by Google but selected by another company. For example, you might have registered with a newspaper website. From information you've given the newspaper, it can make decisions about which ads to show you, and it can use Google's ad serving products to deliver those ads.

You may also see ads on Google products and services, including Search, Gmail, and YouTube, based on information, such as your email address, that you provided to advertisers and the advertisers then shared with Google.

Why am I seeing ads by Google for products I've viewed?

You may see ads for products you previously viewed. Let's suppose you visit a website that sells golf clubs, but you don't buy those clubs on your first visit. The website owner might want to encourage you to return and complete your purchase. Google offers services that let website operators target their ads to people who visited their pages.

For this to work, Google either reads a cookie that's already in your browser or places a cookie in your browser when you visit the golfing site (assuming your browser lets this happen).

When you visit another site that works with Google, which may have nothing to do with golfing, you might see an ad for those golf clubs. That's because your browser sends Google the same cookie. In turn, we may use that cookie to serve you an ad that could encourage you to buy those golf clubs.

Your visit to the golfing site may also be used by Google to show you personalized ads when you later search for golf clubs on Google.

We do have restrictions on this type of ad. For example, we prohibit advertisers from selecting an audience based on sensitive information, such as health information or religious beliefs.

Learn more about [Google ads](#).

Our legal policies

[Privacy Policy](#)

[Terms of Service](#)

[FAQ](#)

More information

[Technologies and Principles](#)

[Advertising](#)

[How Google uses cookies](#)

[How Google uses pattern recognition](#)

[Types of location data used by Google](#)

[How Google Wallet uses credit card numbers](#)

[How Google Voice works](#)

[How Google uses data when you use our partners' sites or apps](#)

Additional resources

[My Account](#)

[Google Safety Center](#)

[Google Product Privacy Guide](#)

[Your privacy, security, and controls](#)

English ▼

[Google](#) · [About Google](#) · [Privacy](#) · [Terms](#)